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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
THAI, HANH B	
ART UNIT	**PAPER NUMBER**
2163	

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/692,212	LIN ET AL.	
	Examiner	Art Unit	
	Hanh B. Thai	2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *amendment filed 9/1/2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-22,24-37 and 39-43* is/are pending in the application.

4a) Of the above claim(s) *26-35,41 and 42* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3-22, 24-25, 36-37, 39-40 and 43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

This is in response to amendment filed September 1, 2005 in which claims 1-25, 36-40 and 43 are pending.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments regarding a client side caching component that supports connection state transitions at the directory level on a logical namespace of claims 1-25, 36-40 and 43 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. Claim 43 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. In particular, the dependent claim 43 fail to further limit the subject matter of the parent claim 1.

Note Ex parte Porter, 25 USPQ2d 1144 (Bd. Pat. App. & Inter. 1992) for situations where a method claim is considered to be properly dependent upon a parent apparatus claim and should not be objected to or rejected under 35 U.S.C. 112, fourth paragraph. See also MPEP § 608.01(n), "Infringement Test" for dependent claims. The test for a proper dependent claim is whether the dependent claim includes every limitation of the parent claim. The test is not whether the claims differ in scope. A proper dependent claim shall not conceivably be infringed by anything which would not also infringe the basic claim.

3. Claims 1, 3-5, 7-16, 18-22, 24-25, 36-37, 39-40 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Domensikos et al. (US 6,065,043) of record in view of Facemire et al. (US Pub. 2005/0091340 A1).

Regarding claims 1 and 43, Domenikos discloses remote file system, comprising:

- One or more surrogate providers comprising at least a first surrogate provider that is a client side caching (CSC) component that selectively caches at least a subset of data from at least one online server and supports connection state transition at the directory level on a logical namespace (col.3, line 55 to col.4, line 4; col.5, line 53 to col.6, line 32, Domensikos discloses the client side cache corresponding to "surrogate provider" for caching portions of the file system); and
- one or more client computers that receive and store the subset of data to their respective local databases (col.7, lines 62-65, Domensikos).

Domenikos, however, does not explicitly disclose the offline use by the respective client computers to facilitate a seamless operation of data retrieval across connectivity states for a user. Facemire discloses a system for processing interactive content offline including serving content for caching in a client side device. The offline client process 140 is configured to retrieve generated content over the network and to store the retrieved content in the cache storage 150 (abstract; summary; Fig.1; [0018]-[0023], Facemire). Therefore, the offline content for client side caching reads on surrogate provider and the offline use by the respective client computers to facilitate a seamless operation of data retrieval across connectivity states for a user. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify

Domensikos to include the claimed feature as taught by Facemire because it would provide an efficient system with flexibility and increasing of the request data resources between client and server ([0008], Facemire).

Regarding claim 3, Domenikos/Facemire combination discloses the system of claim 1 , further comprising an MUP that supports the one or more surrogate providers at the directory level to handle incoming requests from a user (abstract; summary and col.13, lines 1-12, Domensikos).

Regarding claim 4, Domensikos/Facemire combination discloses the system of claim 1, further comprising a second surrogate provider that translates a logical path into a physical path (col.11, line 53 to col.12, line 4, Domensikos)

Regarding claim 5, Domensikos/Facemire combination discloses the system of claim 4, the second surrogate provider is a DFS component that points to at least one physical share or at least one physical server (summary and col.9, lines 49-60, Domensikos).

Regarding claim 7, Domensikos/Facemire combination discloses system of claim 1, the data comprises file access parameters comprising at least one of object access rights and share access rights, the files access parameters corresponding to a cached tile object (col.10, lines 4-15 and col. 12, lines 51-67, Domensikos).

Regarding claim 8, Domensikos/Facemire combination discloses the system of claim 2, the CSC component caches the logical namespace of a file request such that when accessed during an offline state, the file is presented to a user as if it resides at a remote server location (col.18, lines 52-67, Domensikos).

Regarding claim 9, Domensikos/Facemire combination discloses the system of claim 2, the CSC component maintains connection based data structures in logical namespace, the data structures comprising a server connection structure, a share mapping structure, and a per-user share mapping structure to facilitate handling at least one of create, read, and write requests (col.13, lines 19-25 and col.18, lines 52-67, Domensikos).

Regarding claim 10, Domensikosf/Facemire combination discloses the system of claim 2, the CSC component creates file based data structures and shares the data structures with one or more redirectors to facilitate handling at least one of create, read, and write requests, the one or more redirectors operatively connected to one or more network providers (col.17, lines 30-43; col.18, lines 52-67 and col.19, lines 18-35, Domensikos).

Regarding claim 11, Domensikos/Facemire combination discloses the system of claim 1, the first surrogate provider comprises a pre-process handler and a post-process handler which facilitates responding to any one of create, read, and write requests (col.18, lines 52-67 and col.19, lines 18-35, Domensikos).

Regarding claim 12, Domensikos/Facemire combination discloses the system of claim 2, the surrogate providers determine who owns a path request whereby the CSC components makes an initial determination before allowing the DFS component to examine the path to identify any DFS links (col. 15, line 60 to col.16, line 13, Domensikos).

Regarding claim 13, Domensikos/Facemire combination discloses the system of claim 12, the CSC component operates cooperatively with the DFS component to determine whether DFS links are present in the path while in an online connection state (summary; col.13, lines 1-12 and col.15, line 60 to col.16, line 13, Domensikos).

Regarding claim 14, Domensikos/Facemire combination discloses the system of claim 2, the CSC component determines whether to cache an object tile associated with the path (col.15, line 60 to col.16, line 13, Domensikos).

Regarding claim 15, Domensikos/Facemire combination discloses the system of claim 2, further comprising a CSC agent pings the server to determine whether the server is online (col. 12, lines 51-67 and col.15, line 60 to col.16, line 13, Domensikos).

Regarding claim 16, Domensikos/Facemire combination discloses the system of claim 2, the CSC component tracking substantially all DFS links included in the logical namespace persistently to transition a connection state at a proper logical directory which facilitates minimizing a scope of offlineness to a physical share (col.15, line 60 to col.16, line 13, Domensikos).

Regarding claim 18, Domensikos/Facemire combination discloses the system of claim 1, the client computer accesses remote tiles offline by retrieving them from their respective local databases if file access parameters are satisfied (col. 12, lines 51-67 and col.15, line 60 to col.16, line 13, Domensikos).

Regarding claim 19, Domensikos/Facemire combination discloses the system of claim 1, the first surrogate provider keeps track of DFS links corresponding to every object, wherein the DFS links are physical shares (col.11, line 53 to col. 12, line 67 and col.15, line 60 to col.16, line 13, Domensikos).

Regarding claim 20, Domensikos/Facemire combination discloses the system of claim 1, the first surrogate provider detennines whether the request against a specific object should be carried out offline or not, before returning to MUP, by looking at a corresponding physical share

connection state (col.11, line 53 to col.12, line 4 and col.15, line 60 to col.16, line 13, Domensikos).

Regarding claims 21 and 36, Domensikos discloses a method that facilitates maintaining access to remote tiles (e.g., server-based) during any period of disconnect from a remote location, comprising:

- providing one or more client computers, each client computer comprising a local data store (client 12, Fig.4; col.7, lines 62-65 and col.13, lines 59-65, Domensikos discloses a local file system 22 on client computer 12); and
- selectively caching one or more file objects and a logical namespace associated with the one or more file objects from at least one online server (col.3, line 55 to col.4, line 4; col.5, line 53 to col.6, line 32, Domensikos discloses the client side cache for caching portions of the file system reads on "caching one of more file objects").

Domensikos does not explicitly disclose the data store for subsequent offline use by the respective client computers. Facemire discloses a system for processing interactive content offline including serving content for caching in a client side device. The offline client process 140 is configured to retrieve generated content over the network and to store the retrieved content in the cache storage 150 (abstract; summary; Fig.1; [0018]-[0023], Facemire). Therefore, the offline content for client side caching reads on surrogate provider and the offline use by the respective client computers to facilitate a seamless operation of data retrieval across connectivity states for a user. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Domensikos to include the claimed feature as taught by Facemire because it

would provide an efficient system with flexibility and increasing of the request data resources between client and server ([0008], Facemire).

Regarding claim 22, Domensikos/Facemire combination discloses the method of claim 21, further comprising maintaining access to the one or more tiles cached while offline ([0018]-[0023], Facemire).

Regarding claim 24, Domensikos/Facemire combination discloses the method of claim 21, when connected to the remote Location, retrieving a file object from the local data store to mitigate bandwidth usage with respect to accessing the remote location despite being connected to the remote location (summary; col.12, lines 51-67 and col.15, line 60 to col.16, line 13, Domensikos).

Regarding claim 25, Domensikos/Facemire combination discloses t he method of claim 21, further comprising: mapping a logical namespace to a physical namespace to facilitate keeping track of cached files and enumerating directories as files are modified or deleted locally at the client or at the remote location; and tracking connection states and version of physical shares that correspond to at least one object along a path that facilitates updating a tree connect structure in a continuous manner (col.11, line 53 to col.12, line4 and col.15, line 60 to col.15, line 13, Domensikos).

Regarding claim 37, Domensikos/Facemire combination discloses the system of claim 36, further comprising means for maintaining access to the one or more files cached while offline ([0153]; [0155]-[0158] and [0161], Facemire).

Regarding claim 39, Domensikos/Facemire combination discloses the system of claim 36, when connected to the remote location, means for retrieving a file object from the local data

store to mitigate bandwidth usage with respect to accessing the remote location despite being connected to the remote location (Fig.4 and corresponding text, Domensikos).

Regarding claim 40, Domensikos/Facemire combination discloses the system of claim 36, further comprising: means for mapping a logical namespace to a physical namespace to facilitate keeping track of cached files and enumerating directories as files are modified or deleted locally at the client or at the remote location, and means for tracking connection states and version of physical shares that correspond to at least one object along a path that facilitates updating a tree connect structure in a continuous manner (col.11, line 53 to col.12, line 4; col.15, line 60 to col.15, line 13 and col.19, lines 54-61, Domensikos).

4. Claims 6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Domensikos et al. (US 6,065,043) in view of Facemire et al. (US Pub. 2005/0091340 A1) and further in view of Shaw et al. (US Pub. 2002/0083148 A1) of record.

Regarding claim 6, Domensikos/Facemire combination discloses all of the claimed limitation as discussed above, except automatic caching and manual caching based at least in part upon user preferences. Shaw discloses a system and method for sender initiated caching of personalized content including the step of substantial caching based at least in part on the user preference (abstract; [0004] and [0019], Shaw). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination system of Domensikos and Facemire to include the claimed feature as taught by Shaw. The motivation of doing so would enhance the system's speed ([0002], Shaw).

Regarding claim 17, Domensikos/Facemire combination discloses all of the claimed limitation as discussed above, except substantial all CSC agents that it is online to mitigate

latency. Shaw discloses a system and method for sender initiated caching of personalized content including the step of substantial caching based at least in part on the user preference (abstract; [0004] and [0019], Shaw). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination system of Domensikos and Facemire to include the claimed feature as taught by Shaw. The motivation of doing so would enhance the system's speed ([0002], Shaw).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Dujari et al. (US 6,119,153) disclose accessing content via installable data sources.

2. Carter et al. (US 6,026,474) disclose shared client-side web caching using globally addressable memory.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh B. Thai whose telephone number is 571-272-4029. The examiner can normally be reached on 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hanh B Thai
Examiner
Art Unit 2163

November 25, 2005

UYEN LE
PRIMARY EXAMINER